

REMARKS

Overview

In the Office Action dated April 3, 2003, Claims 1-20 were treated as follows:

Under paragraph 1 of the Office Action, Claims 3 and 7 were rejected under the second paragraph of 35 U.S.C. 112.

Under paragraph 2 of the Office Action, Claims 1-3, 14 and 15 were rejected under 35 U.S.C. 102(b) as being anticipated by Kimchi et al. (US 5,765,735).

Under paragraph 3 of the Office Action, Claim 16 was rejected under 35 U.S.C. 102(b) as being anticipated by Gregory (US 5,240,159).

Under paragraph 4 of the Office Action, Claims 1-6, 8, 9 and 11-15 were rejected under 35 U.S.C. 103(a) as being unpatentable for obviousness over Kawaguchi (FR 2,582,490) in view of McBain (US 3,799,413).

Under paragraph 5 of the Office Action, Claims 17 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kimchi and Kawaguchi in view of McBain and further in view of Stuer (US 5,979,727).

Under paragraph 6 of the Office Action, Claims 19 and 20 were rejected under 35 U.S.C. 103 (a) as being unpatentable for obviousness over Mayers (US 6,168,060) in view of Feldman, Jr. (US 6,182,874).

Under paragraphs 7 and 8 of the Office Action, Claims 7 and 10 were identified as containing allowable subject matter.

In response to the above Office Action, original Claims 1-20 have been canceled and replaced with new Claims 21-40, to thereby remove the bases for the rejections. New Claim 21 recites the features of a proximal section and a distal section in each of the first and second strap portions, wherein the proximal and distal sections respectively direct weight of a load towards and away from the body centerline of a person carrying the load. It is submitted that these definitive features are sufficient to distinguish the present invention from

Kimchi et al. It will be noted from *Kimchi et al*, especially Fig. 4, that the strap portion (4) of the Kimchi strap does not include a proximal section and a distal section which respectively direct weight of a load firstly towards the body centerline and then away from the body centerline.

New Claim 22 further distinguishes the invention from *Kimchi et al* by reciting "said proximal sections of said first and said second strap portions extend from said shoulder-engaging portion generally along a direction which is divergent from said general longitudinal direction of said strap, and said distal sections extend from said proximal section along a direction which is generally convergent towards said longitudinal direction of said strap."

New Claim 23 also provides additional distinction from *Kimchi et al* by reciting "said proximal sections of said first and second strap portions extend away from said general longitudinal direction and said distal sections extend along a direction which is generally opposite to the direction of extension of said proximal sections."

New claim 27 has introduces additional distinctive features over *Kimchi et al* by reciting "said shoulder-engaging portion . . . is adapted for reversible use [and] including first and second alternative shoulder-engaging surfaces, such that when said carrying strap is used in the reverse form, said weight directing properties of said first and second portions are maintained by reversing the front and rear relationship of said first and second portions relative to the weight carrying person so that, during normal use, said shoulder-engaging portion is urged towards the neck of said weight carrying person regardless of the shoulder-engaging surface that is in contact with said person."

New Claim 29 is dependent on Claim 21 and introduces further distinctive features over *Kimchi et al* by reciting "said first strap portion, said second strap portion and said shoulder-engaging portion together are substantially W-shaped."

New Claim 30 is dependent on Claim 21 and introduces further distinctive features over *Kimchi et al* by reciting "wherein said first strap portion, second strap portion and said shoulder-engaging portion resemble two boomerangs connected together."

Patentability over *Kimchi et al*

The invention as described by the new claims is neither anticipated nor obvious over *Kimchi et al*.

Kimchi et al teaches a combination shoulder strap 2 and anatomical pad 4. It can be seen from *Kimchi et al* that the strap portions do not include means for directing weight of a load towards and away from the body centerline of a person carrying the load, as better seen in Fig. 4 of US 5,765,735.

The configuration of the present invention helps to alleviate the tendency of the shoulder pad from slipping off the shoulder as the proximal sections will direct weight of the load towards the body centerline (and therefore towards the neck of a user). The component of tension in the proximal portion of the strap tends to pull the shoulder strap towards the neck, as shown in Figs. 6 and 8 of the present application.

In addition, the divergency and subsequent convergency of the first and second strap portions more specifically enable the direction of the weight of a load towards the body centerline and the subsequent transition of the weight distribution towards the side of the body of a user when this invention is used as a single carrying strap. The additional features described in Claim 23 are an alternative description of the features of Claim 22 and therefore are patentable for the same reasons.

Kawaguchi (2,582,490) in view of McBain (3,799,413)

Kawaguchi teaches a shoulder-carrying strap with a shoulder-engaging portion which has a concave and a convex edge and a non-slip surface. However the shoulder-carrying strap of the present invention includes weight distributing first and second strap portions which have specific directions of extension in order to attain the weight direction or redirection to alleviate the tendency of slipping-off the shoulder. As can be seen from the

specification, the first and second strap portions are not symmetrical about the general longitudinal direction of the strap. It will not be apparent to a person skilled in the art simply to provide a shoulder-engaging portion with similar frictional characteristics by simple reversal of the strap, as this will change the weight direction characteristics unless the strap is designed with characteristics mentioned in the new Claim 27 so that, upon reversal of the strap, the weight distribution characteristics of the carrying-strap as defined in Claim 21 will still hold. Hence, the present invention is non-obvious over Kawaguchi in view of McBain.

Moreover, if the McBain strap is simply reversed by flipping over, the end portions 22 and 23 will point towards the body centerline, which is not suitable for use as a single strap. In addition, the strap means 11 which overlies the strap support means will form a narrowed protrusion which will press against the shoulder of the user. In any event, the McBain strap does not teach first and second strap portions having proximal sections which direct weight towards the body centerline.

Non-Obviousness over Mayers (6,168,060) in view of Feldman, Jr. (5,979,727)

The frictional requirements of a well-designed single carrying-strap and a well-designed dual carrying strap are different. In order to alleviate the risk of slipping-off the shoulder of a user, it is desirable that a single carrying-strap includes a frictional shoulder-engaging portion so that the load, which is being carried on one side of the body, will not be dragged off the shoulder. On the other hand, a dual carrying strap including a fastening means joining the two component straps result in a generally V-shaped strap arrangement so that the shoulder-engaging portions of the two constituting straps are always pulled towards the neck of a user by the load. Hence, a frictional shoulder-engaging portion is not generally necessary. To the contrary, a non-frictional or smooth shoulder-engaging portion is desirable for easy and convenient dismount as the user has to act against the components of strap tension pushing towards the neck. When coupled with the requirements concerning weight direction of the first and strap portions of each of the constituting and strap members,

a dual carrying strap with the characteristics set out in claims 25, 27, 28 and 33-35 are therefore non-obvious.

New Claim 34 comprises the features set out in original Claims 1, 5, 6 and 7, which was indicated as being allowable if rewritten in independent form and including all of the limitations of the base claim and any intervening claims.

New Claim 35 includes all the features of original Claim 10 and is now dependent on Claim 34 and is therefore in allowable form as indicated under paragraph 8 of the Office Action.

Conclusion

In view of the foregoing, it is respectfully submitted that all pending claims are allowable over the prior art of record, and a notice to that effect is earnestly solicited.

Respectfully submitted,

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